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The problem of sustainability of organizational success in public educational institutions: a research on the education administrators in Turkey

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Abstract

The concept of sustainable development aims to improve the future generation's living standards and to change the current generation's quality of life. The institutionalizing of the developments and successes in the field of education which is the fundamental component of sustainable development is very important from the point of view of being able to create a sustainable future. Although the extensive change and transformation efforts being expanded in our contemporary educational institutions have met with measurable success, the same cannot be said about the success of their sustainability. In this study the phenomenon of sustainable development is examined specially within the context of the successful orientation initiatives of public educational institutions. In Turkey, the field research on this subject has been carried out by three educational institutions that hold the European Foundation Of Quality Management (EFQM) based National Quality Prize (NQP). The results off the research show; important problems in the sustainability of the successes secured in relation to quality of education and customer satisfaction in educational institutions in the primary and junior high school domains. It has been observed that the obstacles in sustainable development in education are generally administrator based. Also the sustainability phenomenon of the success achieved in educational institution is influenced by the problems of other public structures.

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1. Introduction

Communities of our era, in an environment where the skill of utilizing information is at the forefront or where the traditional information flows are changing, are forcing the organizations related to education and learning to create an organizational structure based on information. In a world that is becoming progressively globalized, it has become a compulsion in addition to a being a requirement for educational institutions where information sharing is at its peak, to produce quality services. In our day we are witnessing extensive systemized quality efforts being

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made not only in private sector operations but also in the public organizations as well and that especially in the educational institutions quality applications are perceived as the key to organizational success. It must be said; as a result of these endeavours internal and external customer satisfaction has been achieved and the organizational successes have been rewarded with national and international success awards.

It is also observed, in addition to the economic development phenomenon from 2000 onwards, and with the adoption of the “sustainable development” model in organizational success and quality management approaches, the educational administrations new problems have been oriented towards education which is “sustainable development” oriented.

1.1. . The object of the research

The research on this subject has been carried out by three educational institutions that hold the EFQM Excellence Model Criteria based National Quality Prize (NQP) which has a national significance in Turkey. In the study the work on the organizational success and the sustainability of quality in education has been carried out in accordance with the administrator criteria of those working in these institutions. *In that context, the object of our study is to emphasize the sustainability of quality in presentation of educational services and organizational successes in the context of TQM applications and educational administrators, in public educational institutions that have adopted Total Quality Management and whose success in the field of educational services have been approved.*

1.2. The importance of the research

It is estimated that the research will be of benefit to educational organizations that are utilizing the Quality applications or by adopting the TQM approach and have the foresight to achieve institutionalization of the organizational success in the processing of quality applications and in imparting them with the success or failure parameter “sustainability” approach.

The research also aims to draw attention to quality prizes in the context of the National Quality Prize and the phenomenon of “awarding quality in education”. When the fact that the prizes form the basis for comparisons and create models is taken into account (Çetin and others; 2001, 719), it is thought that the criteria that measure the quality application level in educational institutions that have been awarded the EFQM based National Quality Prize in Turkey, will also form the basis of a benchmark for other national and international public educational.

1.3. Conceptual foundations

In this section that comprises the components of the work which are; sustainability, sustainable development in education, and the Quality Prize and the conceptual framework for the EFQM Excellence Model concepts, are presented.

1.3.1. Educational model for sustainability and sustainable development

A net compromise has not been easily reachable on the content of “sustainability” which is one of the most popular subjects of the last few years. A simple definition of sustainability may be specified as; “ensuring that the available resources are sufficient for contemporary requirements while allowing the future generations to retain the ability to meet their own requirements”. (Mutlu; 2007, 182) To expand on that a little more, the fundamental principal of sustainability is; the proper use and evaluation of contemporary resources and successes and their protection for the benefit of future generations. (Kinsiz; 2005, 261)

Whereas sustainable development presents our changeable world together with its environment, economy and its social structure as a blended whole. (Harenberg, Haan: p.3) sustainable development concept was first put forward in the document prepared by the “United Nations Environmental Development Commission” known as the “Mutual Future Report”. (Bozdoğan, 2) Rapetto, has defined sustainable development as development strategy that ensures the operations and management of all assets, natural resources and human resources in addition to financial and physical resources, for the long term comfort and well-being of humanity (Rapetto, 609).

When viewed from the perspective of educational institutions, sustainable development is seen by educational institutions as the engine for contemporary education, and transformational school reforms. In “Harenberg and Haan’s work the Educational Model for Sustainable Development” is presented in Diagram 1. (Haan, Harenberg, p.5)

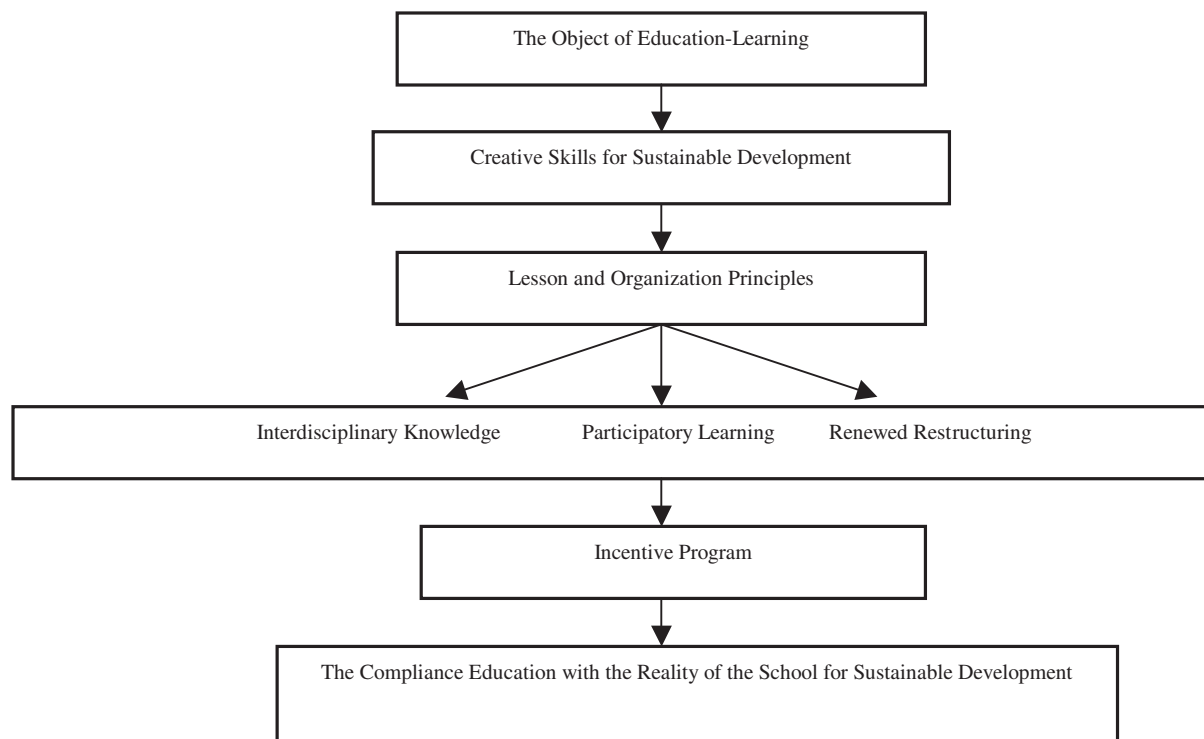


Figure 1. Educational Model for Sustainable Development

It is proposed that the individual’s creativity participation and ability to think freely will be developed with the training model specified. The “Creative Skills” in the model can be explained as the totality of the social, cognitive and emotional abilities. At the same time the creative skills can be interpreted as dynamic and future oriented faculties of educations for sustainable development. Creative faculties also require interdisciplinary knowledge as well. The “interdisciplinary knowledge”, outlines the relationship between nature and cultural worlds and the need for correlated thinking. The “participatory learning” in the model enables all groups that comprise society to participate in the decision making process and for them to feel interest for global principles of justice. In order to ensure the participation of individuals, their capacities for; establishing relationships, planning, communication, cooperation, thinking, risk taking and risk evaluation must be activated and developed. These targets make it compulsory for the teaching methods to be developed. Therefore it has an important contribution for the activation of the positive transformation by making in-school learning and teaching methods more effective. For sustainable development the “Renewed Restructuring” phase encourages the support of educational programs, the multi-directional development educational objectives and the restructuring of learning and educations process in line with the objectives. In this way the central authority on the schools can be restricted, thus making productivity oriented internal reorganization and a kind of institutional freedom possible

1.3.2. Total quality management, quality prizes and the efqm excellence model

Total Quality Management is a management tool that entered management literature after 1950's and by constantly renewing and expanding its content has become an innovative management approach used and implemented by corporations/institutions today. The most accepted definition of the subject is the American Quality Institutes TQM formulation. (Balci, 2002) According to this definition *quality*; "Is an organizational approach used by the management and all the personnel to meet the requirements and expectations of the customer, by using Quantative methods on the organizational processes and the services and products to ensure continual product development." According to Yusof and Aspinwall TQM is philosophy that has helped many companies since, 1960's to date to achieve world class status. (Shari and Aspinwall, 2001)

From 1950's to date, many new techniques, tools, and models have been formulated in shaping the total quality philosophy. Amongst these developments occupy an important position. Quality prizes organizations symbolize prestige and excellence not only for the private but for the public sector as well due to the fact that it measures the integrated management system in all its facets (not just one), and all its processes, targets and its competitive position in the market. In the accepted sense there are three global quality awards. These are the Malcolm Baldrige quality prize in the USA, The Deming quality prize in Japan the EFQM quality prize given in Europe. In Turkey many institutions in the public or the private domain start their TQM applications by taking the "Excellence Model" developed by the European Quality Management Foundation (EFQM) as their basis and start with self evaluation processes and this is continued in line with the plan developed as a result of the self evaluation work to improve the specified corporate areas. Today many corporations/institutions have achieved results that can be considered as exemplary that can be shown as an example to many corporations/institutions. (Erturgut, 2007) EFQM Excellence Model given in Diagram, 2. (Pakdil, 2008)

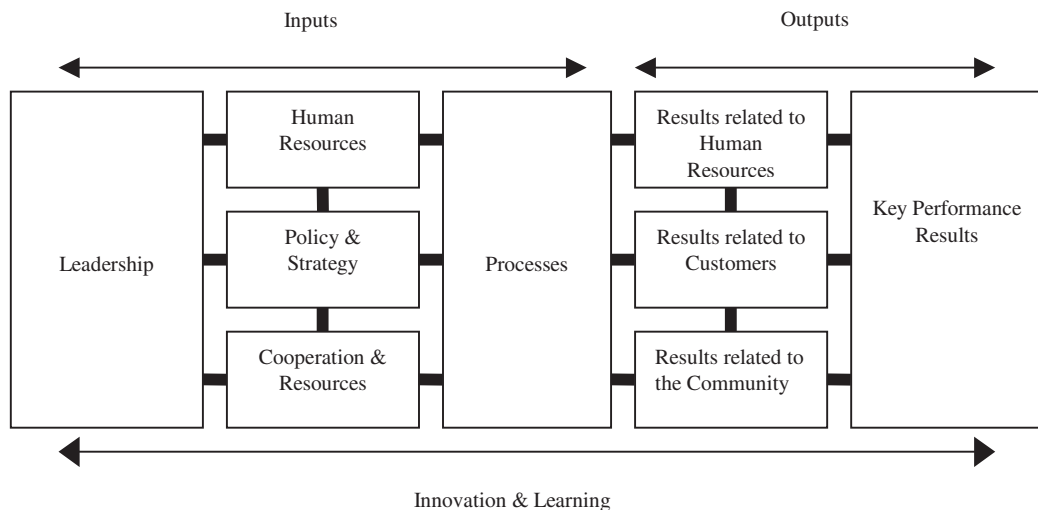


Figure 2. EFQM Excellence Model

EFQM Excellence Model is a model based on nine main criteria. Five of these criteria are “inputs” and four represent the result criteria. The input criteria represent the operations of an institution. The result criteria represent what that institution has realized. The results are a consequence of the inputs. The model that has been designed to take into the account that there may be many approaches in order achieve sustainable excellence in all dimensions related to performance can be summarized by the following sentence. The excellence of results that are experienced by the customers, personnel, and the community in terms of performance, can be provided by the management of the policy, and strategy, the personnel, resources, guided by an appropriate leadership philosophy and understanding . (Saatçioğlu, 2006)

The nine boxes shown in Diagram 2 represent the main criteria that contain the evaluation of the efforts made by the institution in trying to achieve excellence. There are detailed sub descriptions of each criterion that outline it in detail. Each criterion has been supported by numbers of sub criteria in order to make it easier to understand. The sub criteria contain many questions that need to be answered in the process of evaluation. Last of all, in all six criteria, there is a list of related fields. The related field lists are not fixed or compulsory. But they are of assistance in explaining the sub criteria by means of sub articles.

2. Method

This section contains the following headings; the research problem, population and sampling, the data collection methods, statistics and findings used.

2.1. The research problem

The Research Problem; To identify the level of TQM applications in Turkish educational institutions that were the recipients of the National Quality Prize, which is an important symbol of success, at various years, as from the date of the research, and to evaluate the differentiation by date within the framework of “sustainability of success in education”. When the fact that the National Quality Prize has only been awarded to only four educational institutions to date, it has been decided that the evaluation carried out by year will provide a clear idea about the sustainability of success in education. In order to achieve this objective the following questions were asked and answers sought.

1. At the educational institutions that were awarded the NQP, in the opinion of the administrators, at what level are the TQM applications?
2. Was there a difference in terms of TQM applications between the educational institutions, according to the year that the National Quality Prize was awarded?

2.2. Population and samples

The target audience of the research consists of the public educational institutions that have been awarded the EFQM based National Quality Prize by KALDER (National Quality Association). Therefore the population of the research consists of educational institutions that have been awarded the National Quality Prize. The research has been applied directly onto the population and sampling has not been used. Since 2001 only four educational institutions have been awarded this prize by KALDER. the research covers three of these institutions. In this manner % 75 of the educational institutions have been included in the research which is a high representation value. The institutions researched are; National Ministry of Education Research and Development Department (EARGED) / Ankara, Şehit Ali Gaffar Okkan Primary School (ŞAGOI) / Eskişehir and Kadıköy Anatolian High School (KAL) /Istanbul .

2.3. Data Collection Method and Analysis of the Data

In the research survey technique has been used and a research and measurement system based on quantative data has been used. The survey; is a data collection tool designed to obtain uniform standardized data from persons or

organizations from the population/sample. (Ural and Kılıç, p.22) In the survey the Likert Type Scale has been adopted which is used where measurement techniques based on quantitative methods are utilized.

In the research one on one interviews and observation which are scientific data collection methods have been implemented. Observation; is an activity that is used to access concrete evidence that can explain the formation of the events or the phenomenon that is the subject of the research. Interviews are; is the process where prepared questions that are appropriate to the objective of the research are asked to the person or persons whose opinion is desired, by the researcher. (Büyüköztürk, p.4)

In the research the three educational institutions were visited personally by the researcher and an attempt was made to determine the organizational atmosphere in place. The administrators interviewed in the relevant institutions were serving in positions such as head of department, branch manager, school principal and assistant principal. As a scale the demographic features scale and the Total Quality Management scale has been used. The Total Quality Management Applications whose reliability has been tested and whose Factor Analysis has been carried out and whose Total Quality Management Applications scale has been developed by Balcı (Balcı, 2004) has been previously applied to many public institutions.(Erturgut, 2007) *In the interpretation of the expressions in the Total Quality Management Application Scale, the following limits given below have been accepted.*

1,0 – 2,33 low; 2,34-3,66 medium; 3,67-5,00 high

In the survey questionnaire used in the research, the fifth page has been left empty so that the participants can express their views outside of the written questions in the questionnaire.

In the analysis of the data related to the research “SPSS 11.5 For Windows” statistical package program has been used. SPSS (Statistical Packages for Social Sciences) is a widely used statistical data analysis package in social sciences. In the research the reason for the use of the SPSS data analysis, is due to the fact that it contains the presentation and analysis format that is widely seen in national and international scientific research, and scientific magazines. In the analysis of the research data, descriptive and parametric statistics has been used. Descriptive statistics is the statistical transactions that allow the collection of data related to a variable and its subsequent description and presentation. (Büyüköztürk, 2006) In Parametric statistic measures such as arithmetic mean, variance, and ratio are used. In the research Intergroup (intersubject) Research Pattern and the ANOVA Variance Model has been used. In the Intergroup pattern, the significance of the difference between the group’s averages; is tested by the appropriate ANOVA Variance modes. (Ural and Kılıç, 2005 p.18)

3. Findings

This section contains, the findings related to organizational types, demographic and the findings related to the research problem.

3.1. Findings Related to Demographic and Organizational Types

Table 1, The distribution of the Organizations According to the Year They Were Awarded the National Quality Prize

Organization	NQP Year
EARGED	2001
KAL	2004
SAGOI	2005

Between the years of 2001 and 2008 when the National Quality Prize was being awarded to the public sector, the first prize was awarded to National Ministry of Education Research and Development Department (EARGED) in

2002. Kadıköy Anatolian High School (KAL) in 2004 and The Şehit Ali Gaffar Okkan Primary School, (SAGOI) was awarded the National Quality Prize (NQP) in 2005.

Table 2. The Distribution of the Educational Administrators by Organizational type

Organizations	Frequency (f)	Percentage (%)
1- EARGED	19	55,8
2- ŞAGOI	3	8,8
3- KAL	12	35,4
TOTAL	34	100,0

In the research which was carried out at the three educational institutions, the administrators that were included in the survey are shown in Table 2, according to their frequency, and percentage distributions. According to the table out of a total of 34 administrators; 19 work at (%55,8) EARGED, 3 work at (%8,8) ŞAGOI and 12 work at (%35,4) KAL.

Table 3. The Service Duration of the Administrators in the Organization

Organizational Type	The Service Duration in the Organization						Number of Administrators (f)
	Less than 1 year	%	Between 1-4 Years	%	More than 4 Years	%	
EARGED	2	10	3	16	14	74	19
SAGOI	1	33	-	-	2	67	3
KAL	3	25	3	25	6	50	12
Total	6	17,6	6	17,6	22	64,8	34

It can be observed that the administrators duration of service is “over 4 years old” in high percentage of cases(%64,8). When the fact that the NQP prizes have been awarded in the public sector since 2001, it becomes obvious that majority of the administrators were present in their respective educational institutions when the awards began. In that context it can be said that the administrators influenced the success or failure of their institutions before and after the intervals of the award, in other words they influenced the “sustainability of the institutional success”.

After the above organizational types and the demographic findings have been presented, the findings on the principal problem of the research have become clearer. Below findings on the researches main problem as represented by the statistics on the TQM implementation levels in educational institutions and the variances in these institutions by year are presented.

3.2. The findings on the research problem

When the Table in the appendix-1 is viewed, it can be observed that the responses on the level of TQM Applications in their respective institutions is at high levels. ($x_{TQM}=4,055 > 3,66$; $S.S._{TQM}=0,730$) It can be seen that administrators in different positions have given similar and homogenous replies. ($S.S.=0,730$) Thus the educational administrators find the level of TQM Applications at a successful and an adequate level.

The most successful TQM application as perceived by the educational administrators is “the periodic and regular evaluation of the people’s requirements and expectations”. ($x=4,520$; $S.D.=0,529$) an application with a lower level in comparison to other applications is “The ability of the top administration to assume responsibility for the initiation and continuance of TQM applications”. ($x=3,012$; $S.S.=0,912$) Although this article has been valued at the medium level of the scale, it is understood that, the administrators are questioning the top level administration in respect of initiating TQM Applications and assuming responsibility and that they have expectations in this regard, in pursuit of institutional success at all levels in the administration .

The high levels of TQM applications in educational institutions can be attributed to high levels of adoption and support given by educational administrators, to TQM Applications in institutions that have been awarded the National Quality Prize. Also the most successful TQM Applications form the point of view of educational administrators are those that are “ customer oriented, and this can be interpreted as ability to successfully implement, TQM, which is customer focused management tool, in public as well as well as educational institutions and that high levels of customer satisfaction can be obtained.

The breaking point in the sustainability of success in educational institutions, which is the principal problems of the research, is the analysis of the TQM applications by the years in which awards were given. The variance analysis results by year between institutions during the interval when the National Quality Prize was being awarded are given in Table-4. According to these there is a variance in the TQM Applications levels between institutions that were awarded the National Quality Prize. ($F_{(2-233)} = 20,558$; $p < 0,01$) The Tukey Test results that explain the variance between dual groups also shows a variance between TQM Application levels of institutions that were given the award between the years of 2005 and between 2001 and 2004. The institution that received the award in 2005, (SAGOI) possesses the highest level of TQM Application ($x=4,49$). The institution that has the lowest average is (EARGED) with ($x=3,42$) in 2001

According to the Tukey Test the difference is between the years of 2005 and between 2001 and 2004. The educational institution that received the award in 2005, has the highest level of TQM application with($x=4,32$), while the lowest level is possessed by the institution that received the award in 2001 with an average of ($x=3,59$)

Table: 4, One way Variance Analysis of TQM Applications According to the Year They Received the NQP

Year the NQP was awarded	N	Avg.	s.s.	s.d	Sum of squares	Average of Squares	F	P	Significant Difference (Tukey HSD)
2001	19	3,42	0,76						
2004	12	4,24	0,84						
2005	3	4,49	0,59						
Total	34	4,05	0,73						
Source of the Variance									
Between Groups				3	23,63	8,322	20,558	0,000	2001-2004
In the Group				230	88,24	0,246			2004-2005
General				233	111,87				

The institution that received the award in 2001 (EARGED) has a value that is at the threshold of the medium range ($x=3,42$) other institutions average values are within the high range of values. It can be observed that the TQM application levels between institutions are decreasing by year. By looking at these findings it can be supposed that the level of TQM Applications in institutions that received the award, showed a rapid decrease. In study carried

out by Erturgut (2007) at the same institutions, in which the administrator's transformational leadership behaviour was measured, it was determined that there was a drop in the transformational leadership behaviour after the receipt of the award. The findings of this study related to the levels of TQM Applications, supports Erturgut's conclusions. In this situation in the relevant institutions both the leadership behaviour of the educational administrators and the levels of TQM applications have shown a significant decrease. This finding indicates that there is a problem about the sustainability of organizational success in educational institutions.

3.3. Other Findings

This section contains the statements of teachers and other personnel in educational institutions that can be termed as internal customers and the educational administrators that were not included in the survey questionnaire.

- Some of the educational administrators are pointing out the difficulty implementing TQM in the public sector and think that quality work can only be implemented with the support of top administration and motivation.
- In educational institutions some of personnel are of the opinion that changes of administrative personnel are harming the quality work. The personnel that subscribe to this view believe that the new administrators, which do not believe in TQM, assigned to the department/ institution while a successful TQM application is in progress, results in efforts to administer the unit by traditional classical methods and that results in TQM Applications becoming unproductive sometimes to extent of terminating them.
- A mid level educational administrator has stated that in the year the institution was awarded the National Quality Prize, the administrators were at their best and the feedback mechanism and communication at the institution was at an excellent level, whereas at the date of the study the institution was far from its previous organizational atmosphere. Another administrator believes that in order for quality work at the institution to be able to continue with the same degree of effectiveness, some of the administrators in critical positions have to change their outlook on TQM and to develop themselves.
- Some administrators believe that in the event of adoption of the Excellence Model (EFQM) by an institution in total would result in the alleviation of mid and long term organizational problems.
- Some of the personnel at an institution that was awarded the prize define Total Quality Management as "a management approach that values its personnel and their opinions".
- Some of the educational personnel believe that TQM should not be left to the initiative of the individual schools and that strategic quality planning should be made compulsory at every school.
- The mutual expectation of many of the personnel employed at the educational institutions is the development of performance based salary schemes to take into account TQM Applications. The employees are of the opinion the TQM Applications will increase motivation, and is the primary factor in spreading quality applications throughout the institution. *This approach reflects the concrete expectations of employees of educational institutions from top administration in respect of quality management.*
- Some of the employee's state that the TQM work initiated at their institutions have not been effective, and are of the opinion that there was never any TQM Applications initiated in their institutions. According to other employees personnel participation in TQM work is without enthusiasm and compulsory attendances at seminars and subjective application work is detrimental to their performance.

4. Conclusion

On the subject of the researches main problem, the sustainability of success in educational institutions; It has been determined that in those institutions that received the National Quality Prize first, the quality of TQM training and the level of other TQM Applications has dropped in compassion to the others. This situation supports the proposition that in public institutions that have successfully implemented quality applications have problems in institutionalizing these TQM Applications. In this context it may be said that even in educational institutions which have achieved national success in their respective fields, cannot ensure an adequate sustainability of the successes and organizational successes and those they are open to development in this respect.

The research results emphasize the necessity of more training for administrators at every level in educational institutions on TQM philosophy and applications. Some of the administrators are found to be inadequate by other administrators and personnel. In this respect these administrators are obstructing communication between the personnel and the processes, and are thus making the personnel participation less effective and by obstructing creative thinking are becoming administrative hindrances as opposed to administrative support.

Other findings and observations outside of the researches scale, indicate that quality applications in institutions were under the influence of conditions related to institutional processes and the classical problems experienced by the public sector administration.

It is known that in America and Europe private sector institutions use TQM Applications almost as a management reform tool. In that case in the public sector specially in respect of the transformation of educational institutions educational institutions, TQM can be an important tool for change and development. In order to realize this, the critical TQM factors have to be adapted to public sector characteristics, and even more important ensuring and taking the necessary measures for the institutionalizing and the sustainability of successes and the progress made, must be implemented.

The results of this research are limited by the levels of the TQM Applications of educational institutions that have received the EFQM based KALDER National Quality Prize. The subsequent researches in the subject can be expanded to include both public and private institutions which have received not only the National Quality Prize but other quality awards as well. In this manner it will be possible to make comparisons between sectors in respect of TQM Applications levels and the sustainability of success in educational institutions.

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Appendix A. Total Quality Management Applications Scale Critical Factors and the Item Average Values and Standard Deviations

Item No	Total Quality Management Critical Factors and Item Descriptions	Educational		
		N	Avera	S.D.
	General Total Quality Applications	34	4,055	,730
	Top Administration Leadership Employees Training and Participation	34	3,840	,795
It. 1	Incentive for employees to participate in TQM Applications.	34	4,312	,789
It.2	The training necessary to enable employees to work effectively.	34	3,821	,602
It.3	Rewarding the employees for their efforts in quality improvement in the institution.	34	4,101	,811
It.4	The active role taken by the top level administrators in formation of the institutions vision and objectives.	34	4,062	,542
It.5	The ability of top level administrators to set aside time for quality activities.	34	3,080	,860
It.6	The responsibility taken by the top level administrators for the initiation and continuance of TQM.	34	3,012	,912
It.7	A reward system setup by the top level administrators to support employees.	34	3,844	,824
It.8	The creation of an atmosphere by the top level administrators to enable the employees to learn TQM	34	4,103	1,001
It.9	Setting aside by top level administrators of financial resources for the training of the employees.	34	3,741	,896
It.10	Providing training to the employees on problem identification and solving.	34	3,945	,722
It.11	The awareness of the critical importance “employee participation” in the quality improvement work.	34	4,229	,781
	Organizational Culture, Continuous Development and Process Management	34	3,934	,799
It.12	Encouragement of team or group work between the employees.	34	4,113	,724
It.13	The availability of communication channels between employees and departments.	34	4,001	,813
It.14	The availability of a good level of cooperation and coordination at the institution.	34	3,718	,838
It.15	The Definition of key processes in the institution and their communication to the relevant people.	34	4,112	,844
It.16	The awareness of the employees that the real responsibility for the improvement of quality in the institution	34	3,799	,722
It.17	The application of Statistical Control techniques with the aim of development and management institutional	34	4,100	,659
It.18	The existence of clear quality objectives	34	3,698	,998
	Customer Focusing	34	4,348	,598
It.19	The periodic evaluation of people’s requirements and expectations from the institution.	34	4,520	,529
It.20	Design of the institutions work processes in order to meet the people’s wishes and expectations.	34	4,241	,642
It.21	Awareness by the institutions employees on who the internal and external customers are.	34	4,122	,709
It.22	The freedom with which customers can express their complaints and suggestions.	34	4,511	,514